

Call for Workshop Papers

Intelligent Connected Vehicles

Based on Advanced Communication Technologies

The automotive industry is currently undergoing a transformative phase, propelled by a new era of technological advancements. Intelligent Connected Vehicles (ICVs) are emerging as a pivotal focus globally, integrating the physical and information spaces of humans, vehicles, roads, clouds, and service platforms through advanced mobile communication, computer, and control technologies. The synergy enables ICVs to establish comprehensive connections, fostering data interactions across various domains. This workshop aims to explore and advance the innovations in the areas of end-edge-cloud collaborative architecture, networked communication, and collaborative driving, particularly leveraging advanced communication technologies such as 5G and C-V2X PC5.

Topics of Interest:

Papers are invited on a wide array of topics related to "ICVs Based on Advanced Communication Technologies." Some areas of interest include, but are not limited to:

- End-edge-cloud collaborative architecture design.
- Adaptative and efficient data transmission techniques considering spectrum resources and device energy constraints.
- Real-time, ubiquitous, and reliable networked technologies based on advanced communication technology.
- Information exchange, information sharing, and cooperative target identification for networked collaborative driving.
- End-edge-cloud collaborative perception and crowd sensing technologies.
- Risk assessment techniques considering interactions among humans, vehicles, and roads.
- Lane-level right-of-way arbitration and scheduling technologies.
- Collaborative decision-making and planning techniques.
- Multi-vehicle networked collaborative control techniques based on human-vehicle-road interactions, convoy obstacle avoidance, and formation reconstruction.
- ICV testing and verification methods based on virtual simulation, mixed reality, or real-world experiments.
- Remote driving and remote operation technologies.
- Human-machine collaborative decision-making techniques and intelligent cockpit design.
- Boundary design and extension techniques for defining operational conditions of ICV systems.

Submission Guidelines:

Authors are invited to submit original papers presenting innovative ideas, concepts, discoveries, improvements, and novel applications related to the aforementioned topics. Submissions should follow the IEEE IV2024 guidelines and can be uploaded through the <https://its.papercept.net/conferences/scripts/start.pl>. When submitting, please ensure to include the **workshop code: IntelligentConnectedVehicles**.

Important Dates:

- Submission Deadline: February 1, 2024
- Notification of Acceptance: March 30, 2024
- Final Paper Submission: April 22, 2024

Main Contact Person / Organizers:

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- Assoc. Prof. Ye Li, Central South University, China
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We look forward to receiving your contributions and fostering discussions on the cutting-edge advancements in ICVs based on Advanced Communication Technologies.